

**REMARKS**

**Status and Amendment of Claims**

Claims 1-25 are pending in this application. Applicant has amended claims 1 and 14 by changing the shape factor range from "about 20 to about 40" to "about 26 to about 40;" amended claim 6 by changing the shape factor range from "about 20 to about 36" to "about 26 to about 36;" and amended claim 7 by changing the shape factor range from "about 23 to about 33" to "about 26 to about 33." Support for those amendments can be found, for example, but not limited to, the Specification at Table 1 and in the original claims. Applicant respectfully submits that the amendments add no new matter and asks that they be entered without objection. The following remarks are presented in support of the patentability of the pending claims, as amended.

**Rejections under 35 U.S.C. § 103(a)**

The Office issued multiple rejections for claims 1-25 under 35 U.S.C. § 103(a). Applicant respectfully traverses each of those rejections below.

**Lyons and Golley**

The Office rejected claims 1, 3-4, 6-7, 10-11, 13-16, 18, and 20-25 under 35 U.S.C. § 103(a) as allegedly obvious over WO 00/66510 ("Lyons") in view of WO 00/59840 ("Golley"). Applicant submits that, in the very least, Lyons and Golley in isolation or in combination do not teach or suggest the shape factor range set forth in the amended claims.

First, Applicant respectfully points out that, at page 7, Lyons describes equivalent spherical diameter or "esd" as a measure of particle size. However, whatever Lyons may disclose regarding steepness, particle size, and shape factor, Lyons does not expressly teach a shape factor range of from about 26 to about 40 as set forth in amended claims 1 and 14. The reference particularly notes "blocky" kaolins (see abstract) and those with a shape factor of less than 25 (see page 18). Further, according to its Abstract and as discussed throughout its disclosure, Lyons teaches a blend comprising fine kaolin and calcium carbonate having its own particular properties (e.g., its steepness factor, particle size, and weight ratio).

Golley does not disclose either the steepness or the shape factor range recited in the pending claims. Respectfully, Applicant notes that the Office misquoted Golley when it stated that the shape factor is increased from about 15 to 25-50. See Office Action at 3 and 5. Golley states at page 13, lines 26-27, that "the shape factor is increased from about 15 to 25 to at least 50." While the crude clay starting material may have a shape factor of about 15 to 25, the resulting product may have a shape factor of at least 50, which is outside the shape factor range set forth in claims 1 and 14. Applicants' reading of Golley comports with the Office's later comments stating that both Lyons and Golley "are silent as to the specific properties claimed in, specifically, claims 8-9, and 12 regarding shape factors of between 26-30 and 28-30 . . ." Office Action at 11. Golley, therefore, also does not teach the shape factor recited in the pending claims, as amended.

In light of those teachings, Applicant submits that neither of the cited references, either separately or in combination, supports a proper *prima facie* case of obviousness

for the pending claims. Neither reference teaches or suggests the recited shape factor from about 26 to about 40. Lyons points to blocky shape factors (e.g. from 15-25) while Golley points to platy shape factors (e.g. greater than 50). That general difference between blocky and platy shape factors shows that the skilled artisan would not have considered the references together, or to combine them, in an attempt to achieve the subject matter of this application. In fact, Lyons teaches away from the use of platy kaolins when it discusses states that, in the context of a prior art reference, "blocky rather than a platey kaolin unexpectedly produces a combination of sheet brightness and gloss which is better than that reported in this prior art patent." Page 4. Teaching away is an indication that the skilled artisan would not have been motivated to make the Office's proposed combination in an effort to achieve the subject matter of the pending claims. *See MPEP § 2141.02.* Indeed, the MPEP expressly states that "[i]t is improper to combine references where the references teach away from their combination."

MPEP § 2146(X)(D)(2) (*citing In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983)).

The context of platey versus blocky shape factors also indicates that the Office's proposed combination may render the references unsatisfactory for their intended purpose, which also undercuts any *prima facie* case of obviousness. *See MPEP § 2143.01(IV).* Finally, Applicant notes that, even if the skilled artisan were motivated to combine the references as suggested by the Office, at least the shape factor range recited in the pending claims (about 26 to about 40) would not have been achieved due to the blockier (e.g., 15 -25) shape factors of Lyons and the more platey (e.g., greater than 50) shape factors of Golley.

For at least those reasons, directed to general differences in shape factors both between the cited references themselves and between the cited references and the currently claimed subject matter, the skilled artisan would not have found the pending claims to be obvious over Lyons in view of Golley. Applicant, therefore, respectfully requests that the rejection be withdrawn.

Dependent Claims 2, 5, 8-12, 17, and 19 —  
Lyons and Golley in view of Willis, Yuan, Johns, Bown, or Shi

The Office rejected claim 2 under 35 U.S.C. § 103(a) as obvious over Lyons and Golley in view of U.S. Patent No. 5,169,443 ("Willis"), which allegedly teaches crude secondary kaolin from the Para region of Brazil. Claim 5 was rejected as obvious over Lyons and Golley in view of WO 00/32699 ("Yuan"), which the Office believes to teach an e.s.d. of less than 0.25  $\mu\text{m}$  for about 17.8% weight of the particles. The Office rejected claims 8-12 as obvious over Lyons and Golley in view of U.S. Patent Application Publication No. 2004/0250973 A1 ("Johns"), which purports to describe a steepness of at least 32 and a shape factor of at least 30. Claim 17 was rejected under 35 U.S.C. § 103(a) as obvious over Lyons and Golley in view of U.S. Patent No. 6,003,795 ("Bown"), which allegedly teaches a multi-stage grinding process. Claim 19 was also rejected as allegedly obvious over Lyons and Golley in view of U.S. Patent No. 5,089,056 ("Shi"), which the Office believe teaches the use of a water-soluble bleaching agent. See generally Office Action at 8, 9, and 11-13. Applicant respectfully traverses those rejections.

In the very least, neither Willis, Yuan, Johns, Bown, nor Shi remedy the deficiencies of Lyons or Golley regarding blocky versus platey shape factors and their

non-disclosure of the recited shape factor in the range of from about 26 to about 40.

For that reason alone, the addition of the cited secondary references to Lyons and Golley does not support the *prima facie* obviousness of claims 2, 5, 8-12, 17 and 19.

The rejections are also inappropriate as the Office attempts to fill the gaps between Lyons and Golley and the present invention by cherry picking specific properties discussed in the secondary references. That kind of piecemeal assemblage ignores the fact that, to support a *prima facie* case of obviousness, the skilled artisan must have had some reason to combine the noted elements in the same way as the recited inventions. Indeed, the MPEP cautions that “[t]he mere fact that references can be . . . modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP § 2143 (emphasis in original). In addition, even if the skilled artisan would have been motivated to combine the primary references with any one of the secondary references to order to obtain the subject matter recited in the pending claims, it is not permissible to pick and choose properties from various references and assume that the skilled artisan would know how to achieve the desired product having a specific combination of properties, as a reasonable expectation of success is generally required to support a *prima facie* case of obviousness. See MPEP § 2143.02.

In all, Applicant submits that the Office has not established that the noted combinations of references would have rendered the subject matter recited in the pending claims obvious to one of ordinary skill in the art. Accordingly, Applicant respectfully requests that the Office withdraw its rejections of claims 2, 5, 8-12, 17 and 19 under 35 U.S.C. § 103.

**Conclusion**

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and the continued examination of this application and the timely allowance of the pending claims. Should the Office have any questions regarding this application, or wish to discuss any amendment or argument made herein, Application invites the Office to contact the undersigned representative.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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